



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,550

08/22/2006

Mark J. Nixon

06005/41127

8474

45372

7590

03/03/2011

MARSHALL, GERSTEIN & BORUN LLP (FISHER)

233 SOUTH WACKER DRIVE

6300 WILLIS TOWER

CHICAGO, IL 60606

EXAMINER

ZAHR, ASHRAF A

ART UNIT

PAPER NUMBER

2175

NOTIFICATION DATE

DELIVERY MODE

03/03/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mgbdoCKET@marshallip.com

Office Action Summary	Application No.	Applicant(s)	
	10/590,550	NIXON ET AL.	
	Examiner	Art Unit	
	ASHRAF ZAHR	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19,21,22 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19,21,22 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the final rejection for application 10/590550. Claims 1-19, 22-23, 24-28 are pending in this application.

Response to Arguments

35 USC § 101

2. Applicant's amendments to claims 1, 11, and 26 have rendered this rejection moot. Therefore this rejection is withdrawn.

35 USC § 102

3. Applicant argues, "Turner never describes retrieving data indicative of the online operation of a process plant element from a data source when graphics are rendered. Nor does Turner teach displaying a depiction of the process plant element via a user interface in a manner indicative of the on-line operation of the process plant element."

However, Turner discloses a Data Flow and State Machine Designer graphically displays a data flow and state machine and allows the user to design or modify existing data flows and state machines. The Data Flow and/or State Machine diagrams are displayed in the Workspace 20. The updated diagrams displayed in the work place reflect the modification of performed by the user. Therefore, the examiner respectfully disagrees with the applicant.

Art Unit: 2175

4. Applicant also argues, "This passage teaches nothing resembling a conversion engine that generates commands in accordance with a further declarative language based on graphics-related information in the configuration information for the process graphic display."

The commands generated in Thurner are generated in Declarative language formats such as the Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Thurner, col 3, ln 43-47). Therefore, the examiner respectfully disagrees with the applicant.

5. Applicant also argues, "according to the Examiner, Thurner teaches a user interface system "wherein the conversion engine further generates a data source reference file from the information for the process graphic display that identifies a data source for data to be displayed in connection with the graphic display element" at col. 2, lines 55-65. Again, the cited passage is completely devoid of any reference to a conversion engine that generates a data source reference file from the configuration information for the process graphic display and that identifies a data source for data to be displayed in connection with the graphic display element"

However, An Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Thurner, col 3, ln 43-47). These are displayed must identify a data source, i.e. file, object, etc in order to display the graphic element. Therefore, the examiner respectfully disagrees with the applicant.

6. Applicant also argues, “The tools for building and modifying Data Structures and Data flows teach absolutely nothing about automatically updating a plurality of instances of a composite graphical element by modifying a single base object and propagating the modification to all the other instances of the composite graphical element so that each instance of the composite graphical element reflects the modification.”

However, a Data Flow and State Machine Designer graphically displays a data flow and state machine and allows the user to design or modify existing data flows and state machines. The Data Flow and/or State Machine diagrams are displayed in the Workspace 20. The updated diagrams displayed in the work place reflect the modification of performed by the user. Furthermore, Data structures are mapped from application to application (irrespective of their types or geographical locations) using Dataflow Views 27, as shown in FIG. 3b, and communication is synchronized using State Machine Views 28, as

7. Applicant also argues, “At minimum Thurner does not teach a navigation portion as called for in claim 26.”

However, there is also provided Script Editors (for example, VBScript, JScript) which are accessed through the Tools Interface Pane 24. A command window is provided for providing basic commands of the Workbench (Thurner, col 3, ln 55-56). This indicates one can navigate to a script editor or a tool which are data sources and that they are displayed. Therefore, the examiner respectfully disagrees with the applicant.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-19, 21-22, 24-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Thurner et al., US 7,165,226 (Hereinafter, Thurner).

Regarding Claim 1, Thurner discloses “an object entity stored in a computer-readable storage medium for use with a user interface system for a process plant, the object entity comprising: a first portion defining graphics for a depiction of a process plant element of the process plant via the user interface”. Specifically, the Workbench contains a number of tools for building and modifying the Data Structures and Dataflow diagrams. An Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Thurner, col 3, ln 43-47).

Thurner also discloses “and, a second portion identifying a data source for data indicative of on-line operation of the process plant element to be displayed via the depiction”.. Specifically, other views (not displayed) enable the visualization, design

Art Unit: 2175

and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Turner, col 2, ln 55-65).

Turner also discloses “wherein data indicative of the online operation of the process plant element is retrieved from the data source when the graphics for the depiction of the process plant element are rendered for display via the user interface so that the depiction of the process plant element is displayed via the user interface in a manner indicative of the on-line operation of the process plant element”. Specifically, the Multiple Coupled Browser Views Workbench of the present invention provides use of a display device, e.g., Browser or GUI, or the like, to couple several views of a manufacturing plant such that, if the user navigates through one view, all coupled views adjust their focus accordingly. As shown in FIG. 4a, there are at least three permutations of how the views can be coupled as provided by the present invention (Turner, col 3, ln 57-65).

Turner also discloses “wherein the first portion is set forth in a declarative format” (Turner, col 3, ln 43-47).

Regarding Claim 2, Turner also discloses “the object entity of claim 1, wherein the first portion defines an instance of a shape object utilized in rendering the depiction”. Specifically, in the first arrangement, the left (L) and upper views (U), i.e., panes are

Art Unit: 2175

coupled, according to a predetermined relationship, such that selection of an object in either pane results in a corresponding refocusing of the other pane on a related object (Turner, col 3, ln 65- col 4, ln 5).

Regarding Claim 3, Turner also discloses “the object entity of claim 1, wherein the first portion defines an instance of a composite shape object utilized in rendering the depiction”. Specifically, in the first arrangement, the left (L) and upper views (U), i.e., panes are coupled, according to a predetermined relationship, such that selection of an object in either pane results in a corresponding refocusing of the other pane on a related object (Turner, col 3, ln 65- col 4, ln 5).

Regarding Claim 4, Turner also discloses “the object entity of claim 1, wherein the declarative format is in accordance with an extensible markup language” (Turner, col 3, ln 43-47).

Regarding Claim 5, Turner also discloses “the object entity of claim 1, wherein the declarative format comprises a vector graphics format for script defining the graphics” (Turner, col 3, ln 50-55).

Regarding Claim 6, Turner also discloses “the object entity of claim 1, wherein the first portion further defines a data conversion parameter to specify a graphical depiction of the data indicative of on-line operation of the process plant element”.

Art Unit: 2175

Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Turner, col 2, ln 55-65).

Regarding Claim 7, Turner also discloses “the object entity of claim 1, further comprising a third portion defining a method to be implemented to simulate the on-line operation of the process plant element”. Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Turner, col 2, ln 55-65).

Regarding Claim 8, Turner also discloses “the object entity of claim 7, wherein the third portion is set forth in the declarative format” (Turner, col 3, ln 43-47).

Regarding Claim 9, Turner also discloses “the object entity of claim 1, wherein the second portion is set forth in the declarative format” (Turner, col 3, ln 43-47).

Regarding Claim 10, Thurner also discloses “the object entity of claim 1, wherein the graphics include animated elements having animation indicative of the on-line operation of the process plant element”. Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Thurner, col 2, ln 55-65).

Regarding Claim 11, Thurner also discloses “a user interface system for a process plant, comprising: a computer processor, a computer-readable storage medium having instructions stored thereon which, when executed by the computer processor provides” and “a graphic display editor to configure a process graphic display having a graphic display element representative of a process plant element of the process plant”. Specifically, the Workbench contains a number of tools for building and modifying the Data Structures and Dataflow diagrams. An Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Thurner, col 3, ln 43-47).

Thurner also discloses “wherein configuration information for the process graphic display generated by the graphic display editor is stored in the computer-readable medium in accordance with a declarative language” (Thurner, col 7, ln 58-65).

Thurner also discloses “a graphics rendering engine to generate a depiction of the process graphic display during runtime based on Commands derived from the

Art Unit: 2175

configuration information". Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Turner, col 2, ln 55-65).

Turner also discloses "a conversion engine for generating commands in accordance with a further declarative language based on graphics related information of the configuration information and for generating" The commands generated in Turner are generated in Declarative language formats such as the Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Turner, col 3, ln 43-47).

Turner also discloses "a data source reference file from the configuration information for the process graphic display that identifies a data source for data to be displayed in connection with the graphic display element ". Specifically, the Multiple Coupled Browser Views Workbench of the present invention provides use of a display device, e.g., Browser or GUI, or the like, to couple several views of a manufacturing plant such that, if the user navigates through one view, all coupled views adjust their focus accordingly. As shown in FIG. 4a, there are at least three permutations of how the views can be coupled as provided by the present invention (Turner, col 3, ln 57-65).

Regarding Claim 12, Thurner also discloses “the user interface system of claim 11, wherein the declarative language defines an extensible format for expressing the configuration information” (Thurner, col 3, ln 43-47).

Regarding Claim 13, Thurner also discloses “the user interface system of claim 11, wherein the configuration information is stored in accordance with an object model framework based on the declarative language” (Thurner, col 3, ln 43-47).

Regarding Claim 14, Thurner also discloses “the user interface system of claim 13, wherein the object model framework defines primitive shape objects made available by the graphic display editor to configure the process graphic display to include an additional graphic display element constructed from the primitive shape objects. Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Thurner, col 2, ln 55-65).

Regarding Claim 15, Thurner also discloses “the user interface system of claim 13, wherein the object model framework defines a composite object made available by the graphic display editor to configure the process graphic display to include an additional graphic display element constructed from the composite object”. Specifically,

Art Unit: 2175

other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Thurner, col 2, ln 55-65).

Regarding Claim 16, Thurner also discloses “the user interface system of claim 13, wherein the graphic display editor comprises graphical editing tools to create the composite object from previously constructed process model objects stored in the computer-readable medium”. Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Thurner, col 2, ln 55-65).

Regarding Claim 17, Thurner also discloses “the user interface system of claim 16, wherein the graphical editing tools are defined via the object model framework” (Thurner, col 3, ln 43-47).

Regarding Claim 18, Thurner also discloses “the user interface system of claim 11, wherein the declarative language is an extensible markup language” (Thurner, col 3, ln 43-47).

Regarding Claim 19, Thurner also discloses “the user interface system of claim 11, wherein the declarative language defines an XML-based format for describing the configuration information” (Thurner, col 3, ln 43-47).

Regarding Claim 21, Thurner also discloses “the user interface system of claim 11, wherein the further declarative language sets forth the graphics-related language in accordance with a vector graphics format” (Thurner, col 3, ln 43-47).

Regarding Claim 22, Thurner also discloses “the user interface system of claim 11, wherein the conversion engine further generates further commands specifying a data conversion routine for the graphic display element”. Specifically, the Workbench contains a number of tools for building and modifying the Data Structures and Dataflow diagrams. An Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Thurner, col 3, ln 43-47).

Regarding Claim 24, Thurner also discloses “a method of configuring a user interface system for a process plant, comprising: using an object defining a composite graphical element to create a plurality of instances thereof in respective process graphic

Art Unit: 2175

displays to be depicted via the user interface”. Specifically, the Workbench contains a number of tools for building and modifying the Data Structures and Dataflow diagrams. An Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Turner, col 3, ln 43-47).

Turner also discloses “storing data in a computer-readable medium of the user interface system defining the plurality of instances of the composite graphical element” (Turner, col 7, ln 58-65).

Turner also discloses “automatically updating the plurality of instances of the composite graphical element by modifying the object”. Specifically, the Workbench contains a number of tools for building and modifying the Data Structures and Dataflow diagrams. An Object Designer provides graphical design of objects in a number of different views, including Tree, Table, XML, and HTML views (Turner, col 3, ln 43-47).

Turner also discloses “wherein the modification to the object is propagated to the plurality of instances of the composite graphical element causing each of the plurality of instances of the composite graphical element to reflect the modification” (Turner, col 3, ln 45-55). Specifically, a Data Flow and State Machine Designer graphically displays a data flow and state machine and allows the user to design or modify existing data flows and state machines. The Data Flow and/or State Machine diagrams are displayed in the Workspace 20. The updated diagrams displayed in the work place reflect the modification of performed by the user. Furthermore, Data structures are mapped from application to application (irrespective of their types or geographical locations) using Dataflow Views 27, as shown in FIG. 3b, and

Art Unit: 2175

communication is synchronized using State Machine Views 28, as shown in FIG. 3c (Turner, col 3, ln 35-42).

Regarding Claim 25, Turner also discloses “the method of claim 24, wherein the object comprises a definition set forth in an XML-based graphics language” (Turner, col 3, ln 43-47).

Regarding Claim 26, Turner also discloses “an object entity stored in a computer-readable storage medium for use with a user interface system for a process plant, the object entity comprising: a graphics portion defining graphics for a depiction of a process plant element of the process plant via the user interface”. Specifically, other views (not displayed) enable the visualization, design and modification of business objects and business process, runtime GUIs, electrical and mechanical construction of the plant, diagnostic, maintenance, scheduling, information management, PLC-programming, batch design, recipe management, object mappings and project deployments (Turner, col 2, ln 55-65).

Turner also discloses “a parameters portion identifying configurable aspects of the graphics”. Specifically, the Workbench provides an Integrated Engineering Environment in which a graphical configuration of distributed workflows and data flows are visually monitored and controlled (Turner, col 3, ln 30-35).

Turner also discloses “a navigation portion identifying data sources for content to be displayed in connection with the graphics” (Turner, col 3, ln 55-56).

Turner also discloses “wherein the graphics portion, the parameters portion, and the navigation portion are stored in the computer-readable medium discretely” (Turner, col 7, ln 58-65).

Regarding Claim 27, Turner also discloses “the object entity of claim 26, wherein the computer-readable medium comprises a plurality of memory storage devices, such that the graphics portion, the parameters portion, and the navigation portion are not stored on a single memory storage device” (Turner, col 7, ln 58-65).

Regarding Claim 28, Turner also discloses “the object entity of claim 26, wherein the graphics portion comprises a description in an XML-based graphics language” (Turner, col 3, ln 43-47).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2175

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHRAF ZAHR whose telephone number is (571)270-1973. The examiner can normally be reached on M-F 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571)272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashraf Zahr/
Examiner, Art Unit 2175